

## Vocabulary And Common Data Elements Cross Cutting Workspace

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## V-CDE Workspace Accomplishments

- Established Governance Model for CDE Development
- Assignment of Cancer Center-based Members to V-CDE Mentoring Teams for Domain Workspace Projects (SIGs)
- Initiated Evaluation of Existing External Data Standards relevant to Domain Workspaces
- Introduced Proposal for Governance for Review and Approval of caBIG Data and Vocabulary Standards
- Initiated V-CDE Development Projects
- As Cross Cutting Workspace, ongoing work with Architecture to establish overall infrastructure for caBIG





### Information models, data elements, vocabularies

- Agreed that data must be situated and described in the context of an object-oriented information model
- Models shall be composed of well defined data elements
- Vocabulary standards and controlled terminologies must 'permeate' all higher-order constructs in the data elements and models





## V-CDE Workspace Consensus on CDEs

- CDEs to enable
  - Semantic interoperability
  - Unambiguous representation
- Consensus on CDE Development
  - CDEs consistent with ISO/IEC 11179
  - UML model-based CDE development (EA)
  - Load UML models in caDSR
  - Transform UML to metadata (object class associations and attributes)
  - Add EVS properties





cancer Biomedical Informatics Grid

### Common Data Element (CDE) Governance

# Clinical Trials Integrative Research Tissue Banks

Respective Workspace
Vocabulary and Common
Data Element Workspace

Individual Cancer Centers within Workspaces

**Figure 1.** Cancer centers / scientists are responsible for proposing new CDE concepts in the CDE development process. CDE administration is then carried out by a designated group from the V/CDE workspace in cooperation with the respective Workspace. The final review, acceptance and harmonization is carried out by the V/CDE workspace, along with the NCI



### V-CDE Workspace: Current Work

- Formalize Governance Process for review and approval of caBIG Data and Vocabulary Standards
- Approve Best Existing Data Standards relevant to the Domain Workspaces
- Requirements for Software Systems/Tools to support Development and Implementation of CDEs and Vocabulary
- Address Ongoing Support for the Development of CDEs and Vocabulary Content for use in caBIG. Address Identified Needs through Use Cases derived from the caBIG Cancer Centers
- Define Scope of Data Provenance, Data ID Solutions
- Define Requirements for Semantic Metadata Structure
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### V-CDE Workspace: Next Steps

- Define criteria and process for evaluating caBIG artifacts for compliance with caBIG Gold Level
- Ongoing Review and Approval of Candidate Data and Vocabulary Standards
- Data Quality Indicators
- Implement ID Management System
- Address Security, Confidentiality of Data
- Define Scope of HL7 in caBIG Messaging



